

# **CARLOTTA SHOULDER WIDENING**

Humboldt County, California

HUM-36-PM 5.9/7.6

01-323300

## **INITIAL STUDY (CEQA)**



Prepared by the  
State of California Department of Transportation

APRIL 2006



**INITIAL STUDY  
(CEQA)**

In Humboldt County in the Community of Carlotta  
(Shoulder Widening Project)  
Highway 36 for a 1.8-mile Section

01-HUM-036-PM 5.92/7.6  
01-323300

**APRIL 2006**

## **GENERAL INFORMATION ABOUT THIS DOCUMENT**

### ***WHAT'S IN THIS DOCUMENT?***

This document is an Initial Study (IS) which examines the potential impacts of the proposed project located in Humboldt County, California. The document describes why the project is being proposed, how the project may affect the existing environment and mitigation to reduce or eliminate environmental impacts.

### ***What should you do?***

- Please read this Initial Study
- We welcome your comments. If you have any concerns regarding the proposed project, please submit comments via regular mail to Caltrans, Attn: Tom Balkow, Chief, Office of Environmental Management, 1657 Riverside Dr. Redding, CA 96001; submit comments via email to [thomas\\_balkow@dot.ca.gov](mailto:thomas_balkow@dot.ca.gov)
- Submit comments by the deadline May 15, 2006.

### ***What happens after this?***

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) undertake additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and build all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write:

Department of Transportation  
Attn: Equal Opportunity Office  
1657 Riverside, Redding, CA 96001  
(530) 225-3425 Voice, or (530) 225-2019 TTY


Widen Shoulders of Highway 36 for a 1.8-mile section through the community of Carlotta, in  
Humboldt County

### INITIAL STUDY (CEQA)

Submitted pursuant to: Division 13 Public Resources Code

### THE STATE OF CALIFORNIA - Department of Transportation

4/4/06  
Date of Approval

  
LENA R. ASHLEY, Chief North Region  
Environmental Services, North  
California Department of Transportation

## Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

### ***Project Description***

This project proposes to widen the paved shoulders on Route 36 between PM 5.92 and PM 7.6 within the unincorporated community of Carlotta in Humboldt County. The purpose of the project is to 1) eliminate the concerns of school officials and local residents that the existing highway is unsafe for school children, other pedestrians, and bicyclist traveling along the highway's shoulders; 2) increase sight distance at driveways; and 3) provide more room for Caltrans crews and utility crews to perform maintenance activities and for mail vehicles, school busses, disabled vehicles, etc. to temporarily stop out of the way of traffic. The proposed funding for this project is from the State Highway Operation Protection Program (SHOPP) as a "Non-Capacity Increasing Operational Improvement Project," in the 2008/09 Fiscal Year. The proposed project requires new right-of-way. Temporary and permanent construction easements will be acquired. The preferred alternative includes the minimal widening required to construct the project. The preferred alternative is summarized as follows:

Preferred Alternative: This alternative proposes to construct 1.7 miles of 5 foot shoulder on both sides of the highway, modify some roadway drainage, construct left-turn channelization at Wilder Road, re-stripe the centerline with double yellow line, construct Gateway Features at both ends of the community, and to overlay the existing pavement with open graded asphalt concrete.

A feature of this alternative is a desire to provide some *traffic calming* aspects within the design. *Traffic calming* is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. Since State Route (SR) 36 is also the *main street* for Carlotta, this project is designed to include context sensitive features intended to calm traffic, they are: 1) Widening the roadway to provide shoulders for pedestrians and bicyclists, while maintaining the existing 11 foot traffic lanes is a method for achieving this effect; 2) Gateway signage will alert motorists that they are now entering the Carlotta community, which should also provide a calming effect; and finally 3) Striping the 5 foot shoulder with a six inch solid white edge provides the preception of a barrier to the traveling motorist and again will contribute to traffic calming along this segment of SR 36.

As a consequence of this project, this alternative will include relocating fences, mailboxes, utility poles, and will replenish landscaping. The total estimated cost is \$5,640,000 including \$2,744,000 in R/W costs that may have escalated recently, and estimated utility relocation costs \$400,000.

**Determination**

Caltrans has prepared an Focused Initial Study, and determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The project will not have an effect on wetlands, air quality, agriculture, mineral resources, geologic and seismic hazards and energy resources.
- The project will not have a significant effect on historical resources, water quality, biological resources, vegetation, floodplains, soil erosion, noise, a Wild and Scenic River and scenic resources.
- The project is consistent with planning, land use, transportation, housing, emergency services, utilities, and other social and economic factors relevant to the area.
- An underground storage tank site located within the project limits is listed on the State's April 1998, List of Hazardous Waste and Substances Sites List, also referred to as the "Cortese List". A contamination plume exists on the site and may extend under the existing highway. It is anticipated that the proposed work, however, will not contact the contamination plume moving with the groundwater at moderate depth. Therefore, the project appears free of hazardous waste issues. Mitigation measures will be implemented if contamination is discovered during construction.

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CHARLIE FIELDER  
District Director, District 1  
California Department of Transportation

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Date

## Summary

This project proposes to widen the paved shoulders on Route 36 between PM 5.92 and PM 7.6 within the unincorporated community of Carlotta in Humboldt County. The purpose of the project is to 1) eliminate the concerns of school officials and local residents that the existing highway is unsafe for school children, other pedestrians, and bicyclist traveling along the highway's shoulders; 2) increase sight distance at driveways; and 3) provide more room for Caltrans crews and utility crews to perform maintenance activities and for mail vehicles, school busses, disabled vehicles, etc. to temporarily stop out of the way of traffic. The proposed funding for this project is from the State Highway Operation Protection Program (SHOPP) as a "Non-Capacity Increasing Operational Improvements Project," in the 2008/09 Fiscal Year. The proposed project requires substantial new right-of-way. Temporary and permanent construction easements will be purchased. The preferred alternative includes the minimal widening required to construct the project. The preferred alternative is summarized as follows:

Preferred Alternative: This alternative proposes to construct 1.7 miles of 5 foot shoulder on both sides of the highway, modify some roadway drainage, construct left-turn channelization at Wilder Road, re-stripe the centerline with double yellow line, construct Gateway Features at both ends of the community, and to overlay the existing pavement with open graded asphalt concrete.

A feature of this alternative is a desire to provide some *traffic calming* aspects within the design. *Traffic calming* is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. Since State Route (SR) 36 is also the *main street* for Carlotta, this project is designed to include context sensitive features intended to calm traffic, they are: 1) Widening the roadway to provide shoulders for pedestrians and bicyclists, while maintaining the existing 11 foot traffic lanes is a method for achieving this effect; 2) Gateway signage will alert motorists that they are now entering the Carlotta community, which should also provide a calming effect; and finally 3) Striping the 5 foot shoulder with a six inch solid white edge provides the preception of a barrier to the traveling motorist and again will contribute to traffic calming along this segment of SR 36.

As a consequence of this project, this alternative will include relocating fences, mailboxes, utility poles, and will replenish landscaping. The total estimated cost is

\$5,640,000 including \$2,744,000 in R/W costs that may have escalated recently, and estimated utility relocation costs \$400,000.

Caltrans has prepared an Initial Study, and determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The project will not have an effect on wetlands, air quality, agriculture, mineral resources, geologic and seismic hazards and energy resources.
- The project will not have a significant effect on historical resources, water quality, biological resources, vegetation, floodplains, soil erosion, noise, a Wild and Scenic River and scenic resources.
- The project is consistent with planning, land use, transportation, housing, emergency services, utilities, and other social and economic factors relevant to the area.

This Initial Study focuses on the hazardous waste issue. An amendment to the California Environmental Quality Act (CEQA) which became effective January 1, 1992, stipulated that no project located in the vicinity of a site included on a list (Cortese/LUFT) compiled pursuant to Section 65962.5 of the California Government Code, shall be exempt under CEQA. Information regarding the location and condition of the hazardous waste site must be disclosed to the public residing within the immediate vicinity of the affected site. This Initial Study has been prepared to comply with this requirement.

***Hazardous Waste, Humboldt County – Case #12436.*** Judy’s Market in Carlotta is listed on the April 1998 List of Hazardous Waste Sites, also referred to as the Cortese List. This list is a compilation of leaking underground storage tank sites identified by the State Water Resources Control Board: *active, closed and inactive* landfills identified by the Integrated Waste Management Board; and potential hazardous waste sites identified by the Department of Toxic Substances Control. Judy’s Market was an active leaking underground fuel tank site (LUFT site) as defined by the North Coast Regional Water Quality Control Board (NCRWQCB) and has been since 1992. The case type describes the soil as impacted with Methyl Tertiary Butyl Ether (MTBE.) The site management description for this property is “Brownfield,” (Abandoned property not redeveloped due to contamination and liability cost concerns.)

Work on the project is far enough away and far enough above, contaminated soil, that there should be no hazardous waste issues. This project will excavate earth adjacent to



the property to a depth of no more than approximately 5 to 6 feet. Any potential contamination of the soil or groundwater is thought to be at the bottom level of the former underground storage tanks. If contaminated soil is discovered during excavation, project work will cease until the appropriate measures are implemented to contain and dispose of the waste using proper safety and handling techniques.

### **Permits and Coordination**

No permits required (Refer to Carlotta Shoulder Widening Natural Environmental Study Memorandum)

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## LIST OF TECHNICAL STUDIES THAT ARE BOUND SEPARATELY

Natural Environment Study

Floodplain Evaluation Report

Historical Property Survey Report

- Archaeological Survey Report

Hazardous Waste Reports

- Initial Site Assessment
- Preliminary Site Investigation (Geophysical Survey) and Soil and Water Analysis

Scenic Resource Evaluation/Visual Impact Assessment

## List of Abbreviated Terms

AC	Asphalt Concrete
ADA	Americans with Disabilities Act
APE	Area of Potential Effects
C	Celsius
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
dBa	Decibels
DFG	California Department of Fish and Game
EFH	Essential Fish Habitat
ESU	Evolutionary Significant Unit
F	Fahrenheit
FHWA	Federal Highway Administration
ft	Foot/Feet
ISA	Initial Site Assessment
km	kilometer(s)
KP	Kilometer post
LUST	Leaking Underground Storage Tank
m	Meter(s)
mi	Mile(s)
NCRWQCB	North Coast Regional Water Quality Control Board
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
OGAC	Open Grade Asphalt Concrete
PM	Post Mile
PUD	Trinity Public Utility District
RAC	Rubberized Asphalt Concrete
RCB	Reinforced Concrete Box
RWQCB	Regional Water Quality Control Board
SHOPP	State Highway Operation and Protection Program
SONCC	Southern Oregon/Northern California Coasts
SR 36	State Route 36
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TWLT	Two Way Left Turn Lane
USACE	United States Army Corps of Engineers
WCSD	Weaverville Community Services District
WPCP	Water Pollution Control Plan

# Chapter 1 Purpose and Need

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## 1.1 Project Purpose

The California Department of Transportation (Caltrans), in cooperation with the Federal Highway Administration (FHWA), is proposing to improve safety by widening the shoulders along State Route 36 in and adjacent to the community of Carlotta, Humboldt County (Figures 1 and 2). The project proposes to construct 1.7 miles of 5 foot shoulder on both sides of the highway, modify some roadway drainage, construct left-turn channelization at Wilder Road, re-stripe the centerline with double yellow line, construct Gateway Features at both ends of the community, and to overlay the existing pavement with open graded asphalt concrete.

A feature of this alternative is a desire to provide some *traffic calming* aspects within the design. *Traffic calming* is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. Since State Route 36 is also the *main street* for Carlotta, this project is designed to include context sensitive features intended to calm traffic, they are: 1) Widening the roadway to provide shoulders for pedestrians and bicyclists, while maintaining the existing 11 foot traffic lanes is a method for achieving this effect; 2) Gateway signage will alert motorists that they are now entering the Carlotta community, which should also provide a calming effect; and finally 3) Striping the 5 foot shoulder with a six inch solid white edge provides the preception of a barrier to the traveling motorist and again will contribute to traffic calming along this segment of SR 36.

As a consequence of this project, this alternative will include relocating fences, mailboxes, utility poles, and will replenish landscaping.

## 1.2 Project Need

Residents and school officials of Carlotta have indicated that there is a need for wider shoulders to accommodate pedestrians and bicyclists. The existing highway has paved shoulders that are up to 4 feet wide in some locations, but more typically, paved (or even graded) shoulders are non-existent or are much narrower than current standards. Sections of the highway east and west (outside) of the project limits generally have wider shoulders and less surrounding community development. As

the community of Carlotta is situated longitudinally along this section of highway, and no other streets parallel to the highway connect the various lanes and driveways, a pedestrian traveling through Carlotta has no other option than to travel on the highway's shoulders. Throughout the majority of the project limits, the California Department of Transportation has only prescriptive rights. Additionally, in many locations, the proximity of the traveled way to fences, shrubs, etc. result in insufficient sight distance from driveways.

### **1.3 Project Background**

The project was initiated in 1992, prompted by a letter written by a concerned citizen indicating that the existing roadway provided less than desirable shoulders for pedestrians and bicyclists. Children walk along the highway to Cuddeback Elementary School, located on Wilder Road, and to a nearby market adjacent to the highway. Another letter in 1993, was submitted from the Superintendent of Cuddeback School, expressing concerns about a risk of accidents involving children walking to and from school, and involving the school bus when making stops with insufficient room available to pull safely out of the way of traffic. In August 1998, a public meeting was held in Carlotta. The public's response appeared to indicate that the proposed project was supported by most local residents. The perceived safety benefits and desirability of left-turn channelization on to Wilder Road was also identified through the testimony of participants in the public meeting. The Project Study Report was approved on October 30, 1998 and *Exceptions From Mandatory Design Standards* were approved in November 1998. The project was put on hold in 2003 due to budget constraints.

According to the 2002 California State Highway Log for District 1, the existing section of Route 36 considered in this report is a two-lane conventional highway with 10 to 12 foot lanes and 0 to 4 foot paved shoulders. The road is characterized by an alignment that is curvilinear, varying from 35 mph curves to 55 mph straight sections. Vertical alignment is relatively flat ( $+0.2\% \pm$  grade eastbound) with an occasional, relatively minor, roll.

The Preliminary Hydraulic Recommendation identifies a total of six existing culverts, including those that convey Cuddeback and Fiedler Creeks under the highway. The unincorporated rural community of East Carlotta has developed both sides of Route 36, and one County road (Wilder Road), several private lanes, and approximately 82 private driveways access Route 36 within the project limits. Fencing, landscaping,

leach-lines, and wells abut or are very close to the existing right of way line and edge of pavement. Several houses or buildings are located less than 50 feet from the center of the highway.



# **Chapter 2**      Project Alternatives

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## **2.1      Alternative Development Process**

Alternatives were developed in conjunction with Regional and System Planning and Traffic Safety data. The following summarizes how planning and traffic data influence the alternative development process.

## **2.2      Planning**

### **2.2.1      Regional and System Planning**

Route 36, a Federal Aid Primary Rural Minor Arterial, is a regional east-west route and is part of the Federal Forest Highway System from PM 45.08 on into District 2. It is a two lane conventional highway functionally classified as a Minor Rural Arterial.

### **2.2.2      State Planning**

The Route Concept Report (RCR) calls for Route 36 to remain a two-lane conventional highway on its present alignment, and to be maintained and rehabilitated, as necessary, at its present width. The RCR also states that operational improvements and safety projects should be considered on a limited basis, and constructed to appropriate standards.

### **2.2.3      Regional Planning**

The 1998 -2000 Humboldt County Regional Transportation Plan, adopted in October 1999, includes the Route 36 shoulder-widening project as a mid-to long-range Capital Improvement Program candidate for State Highway Operation Protection Program (SHOPP) funding.

### **2.2.4      Local Planning**

Government for the small, unincorporated community is at the County level. Carlotta has no local planning documents. The project will not affect the capacity or design speed of the subject section of highway and will have no impact on economic growth or the rate of development, commercial, residential, or otherwise.

### **2.2.5 Transit Operator Planning**

Humboldt Transit Authority does not provide bus transit service on Route 36. The project will not have an impact on transit service demand.

### **2.2.6 Current and Forecasted Traffic**

The most recent 2003 Annual Daily Traffic (ADT) for State Route 36 in Carlotta is 3,300. The Peak Hour Volume is 470. Accident data shows 14 collisions occurring from October 1998 through September 2003. Five of the fourteen collisions were injury, and there were no fatal collisions. The type of collisions that occurred most often were vehicles that hit objects within the roadway. The primary collision factors associated with these collisions include eight due to unsafe speed, three to improper turns, two caused other than by the driver, and one due to the influence of alcohol. Environmental factors show that six accidents occurred under dark conditions while half of the collisions occurred under wet pavement conditions.

## **2.3 Project Alternatives**

Final selection of an alternative will not be made until after the full evaluation of environmental impacts, full consideration of public hearing comments, and approval of the final environmental document. Eleven alternatives were identified as potential solutions to meet the purpose and need discussed earlier in this study.

### **2.3.1 “No Build” Alternative**

Under CEQA, environmental review must consider the effects of not implementing the proposed project. Existing conditions would not be changed as a result of the no-build alternative. Although this alternative would not result in environmental impacts, it would not achieve the basic purpose and need for the proposed project, which is to provide the needed operational improvements.

### **2.3.2 “Build Alternative” (Preferred Alternative)**

This alternative proposes to construct 1.7 miles of 5 foot shoulders on both sides of the highway, to improve highway drainage, to construct left-turn channelization at Wilder Road, to re-stripe the centerline with double yellow line, to construct Gateway Features at both ends of the community, and to overlay the existing pavement with open graded asphalt concrete. The majority of the proposed right of way will require

minimal acquisition on each side of the existing highway centerline. Utilities are proposed to be placed underground.

A feature of this alternative is a desire to provide some *traffic calming* aspects within the design.

*Traffic calming* is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. Since State Route 36 is also the *main street* for Carlotta, this project is designed to include context sensitive features intended to calm traffic, they are: 1) Widening the roadway, except at a bridge, to provide shoulders for pedestrians and bicyclists, while maintaining the existing 11 foot traffic lanes is a method for achieving this effect; 2) Gateway signage will alert motorists that they are now entering the Carlotta community, which should also provide a calming effect; and finally 3) Striping the 5 foot shoulder with a six inch solid white edge provides the preception of a barrier to the traveling motorist and again will contribute to traffic calming along this segment of SR 36.

As a consequence of this project, this alternative will include relocating fences, mailboxes, utility poles, and will replenish landscaping.

- Roadway Construction \$2.896 million
- Right-of-way \$2.744 million
- Total estimated cost \$5.640 million

## **2.4 Alternatives Considered and Withdrawn**

### **2.4.1 Alternative 1**

Work for this proposed project alternative include constructing 1.9 miles of 5 foot shoulders with 11 foot lanes and the riparian habitat at the beginning of the project. This alternative would modify highway drainage, construct left-turn channelization at Wilder Road, overlay the road with AC, re-stripe the centerline with double yellow line, put in metal beam guard railing, and construct Gateway Features at both ends of the community. Right of way acquisition will be minimal and relocation of only those utilities affected by the widening. This would result in the acquisition of 5 to 6 parcels and resulting higher cost and impact to the community.

### **2.4.2 Alternative 2**

This alternative proposed to construct 1.7 miles of 5 foot shoulders with 11 foot lanes that would avoid the riparian habitat at the beginning of the project. Similar to Alternative 3, this alternative would also modify highway drainage, construct left-turn channelization at Wilder Road, overlay the road with AC, re-stripe the centerline with double yellow line, put in metal beam guard railing, and construct Gateway Features at both ends of the community. Right of way acquisition would be adequate to compensate for relocation of utilities and fixed objects outside the clear recovery zone (32 feet on each side of the existing centerline). This alternative would result in significant right of way acquisition and major impacts to the community.

### **2.4.3 Alternative 3**

Work for this proposed project alternative included constructing 1.9 miles of 5 foot shoulders with 11 foot lanes and the riparian habitat at the beginning of the project. This alternative would modify highway drainage, construct left-turn channelization at Wilder Road, overlay the road with asphalt concrete (AC), re-stripe the centerline with double yellow line, put in metal beam guard railing, and construct Gateway Features at both ends of the community. This alternative was eliminated in order to avoid the riparian habitat.

## **Chapter 3**      Affected Environment, Environmental Consequences, and Mitigation Measures

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### **3.1      Hydrology, Water Quality, Stormwater Runoff**

The project is located within the Van Duzen River watershed with elevations descending from 2,953 to 1,936 feet. Cuddeback and Fielder Creeks cross beneath the highway within the project limits. They flow southerly into the Van Duzen River which is within 1000 feet of the highway.

#### **3.1.1      Impacts**

Shoulder widening of the highway (except for those in the vicinity of Fielder and Cuddeback Creeks) will require that culverts be lengthened and the additional earthwork has the potential to temporarily degrade water quality. No regulatory permits are required for this project because the only drainage systems (culverts) that would be extended are culverts that convey roadside runoff from one side of the highway to the other side. None of the drainage systems or their planned extensions drain into Cuddeback or Fielder Creeks, therefore, no jurisdictional waterbodies (streams, creeks, wetlands, etc...) will be impacted by extension of these systems. Currently, four foot shoulders exist in these areas.

There is potential for post construction dust washing into the creeks after the first few rains. This is a short term and temporary impact.

#### **3.1.2      Mitigation Measures**

The contractor will be required to submit a Water Pollution Control Plan (WPCP) or a Stormwater Pollution Prevention Plan (SWPPP) as required by the State Water Resources Control Board. In addition, the contractor will be required to adhere to Caltrans' Standard Specifications pertaining to erosion control and water quality. All disturbed areas will be mulched and hydro-seeded.

## **3.2 Hazardous Waste/Materials**

The primary concern relative to hazardous waste is encountering petroleum hydrocarbons, released from leaking underground storage tanks (LUST,) during construction. Underground storage tanks are used for heating oil in residential and commercial buildings and for storing gasoline and diesel fuels at service stations. In the past, many of these have been abandoned in place.

One proposed work area location is adjacent to Judy's Market at 7695 Highway 36. It is listed on the 1998 Hazardous Waste and Substances Site List. This grocery store dispensed gasoline, and until October 1992, had two underground storage tanks. Leakage from the tanks contaminated the soil, and likely the groundwater, in the immediate vicinity of those tanks. Information defining the actual extent of the leak has not yet been developed since the property owners have not responded to demands from Humboldt County for site investigations. Caltrans will pave on the Judy's Market property. The project work however, will include excavation for construction of the shoulder structural section and culvert (to a depth of 0.6m/2ft. and 1.5m/2ft. respectively). Any potential contamination of the soil is thought to be approximately at the bottom level of the former underground storage tanks.

Additionally, certain removal methods of yellow thermoplastic traffic striping, could be considered hazardous to humans, construction best management practices will be implemented to insure appropriate handling and proper disposal.

### **3.2.1 Impacts**

Because of the perceived location of petroleum hydrocarbons (at the bottom level of the former underground storage tanks) and because only minor paving will occur on Judy's Market property this project should have no issue regarding hazardous waste for petroleum hydrocarbons.

Removal of yellow thermoplastic traffic striping from the street surface using sandblasting, grinding or scraping techniques produces a hazardous condition to people and animals during exposure. If the thermoplastic striping is removed while still adhered to the asphalt, then a hazardous air-borne condition can be avoided. As long as the striping does not become friable (dust-like) it poses no hazard.

### **3.2.2 Mitigation Measures**

Any groundwater encountered throughout the project area, within 200 feet of the Judy's Market property, will be tested for petroleum hydrocarbon contamination and will be collected and disposed of at an appropriate facility if found to be contaminated. If obvious signs of contamination in soils or groundwater are encountered during excavation (odors, sheens or discolored soil), work in that excavation will stop immediately. The Humboldt County Division of Environmental Health will be notified. Grading and construction within uncontaminated sections of the project would continue during environmental evaluation and cleanup process.

Additionally, Caltrans will pothole in project areas to test for contaminated soil prior to construction. This process will assess if contaminated soil and/or groundwater is present in any area to be excavated (potholing will cover all depths required for proposed construction related excavations.) By using the potholing technique, the Resident Engineer can better assess the risk of encountering contaminated material during construction.

Caltrans will access where yellow thermoplastic striping is located within the project limits. Material found within the project limits will be removed and disposed of by a licensed and certified abatement contractor prior to demolition or other activities that will disturb the materials.

## **3.3 Noise**

The project area is located in a predominantly rural residential strip along Route 36, which includes an abandoned mini market/gas station and underdeveloped land resources. The area is a community "Main Street" environment bisected by a two-lane highway. The current annual daily traffic (ADT) for State Route 36 in Carlotta is approximately 3,300. Traffic counts indicate approximately 470 vehicles are in the corridor during the peak hour. Because of the proximity between State Route 36 and the residences that line the State Route, the noise level within the community is directly related to the traffic moving through the community.

### **3.3.1 Impacts**

The project will not increase the capacity of the highway and therefore will not result in an increase of the ambient noise levels due to highway traffic. Temporary

increases in ambient noise levels and vibration is unavoidable during construction due to the operation of construction equipment.

### **3.3.2 Abatement Measures**

Noise produced by construction equipment shall conform with the Caltrans Standard Specifications, Section 7-1.01I. The contractor shall also comply with all local sound control and noise level rules, regulations, and ordinances. The noise level requirement shall apply to the equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel. All internal combustion engines used on the job shall be equipped with a muffler of a type recommended by the manufacturer.

## **3.4 Threatened and Endangered Species**

A list of threatened and endangered species (“species list”) obtained from the US Fish and Wildlife Service (USFWS) indicates that the following bird species may be present within the Hydesville quadrangle, in which the project is located: marbled murrelet, northern spotted owl, bald eagle, and Western yellow-billed cuckoo.

The species list also indicates possible presence of several listed fish species. Evolutionarily Significant Units (ESUs) of three federally listed salmonid species: Southern Oregon/Northern California Coastal (SONCC) coho salmon; California Coastal (CC) Chinook salmon; and Northern California (NC) steelhead may occur within either or both creeks. Additionally, one federal candidate species – green sturgeon - could potentially occur within either or both of the creeks. Occurrence of green sturgeon within either creek (i.e. part of the species’ historic range) is highly unlikely. Recent records indicate that green sturgeon no longer spawn in this region of Northern California. They are currently found only in the Klamath River Basin and the Sacramento River.

Both Cuddeback and Fielder Creeks fall within the boundaries of designated critical habitat for SONCC coho, and within the boundaries of proposed critical habitat for both CC chinook and NC steelhead.



### **3.4.1 Impacts**

According to Ken Hoffman of the USFWS, suitable habitat for neither spotted owls nor marbled murrelets exists within or near the project limits.

Project-related noise will not impact owls or murrelets as suitable habitat for both species is at least one mile away from the project area. Likewise, no suitable habitat for either bald eagles or yellow-billed cuckoos exists in or near the project site.

Since no work is proposed in either Cuddeback or Fielder Creek, project-related impacts to listed fish or designated/proposed critical habitat are not anticipated. Suitable habitat for the federally endangered tidewater goby is not present within the project limits.

A search of the CNDDB database yielded records for two additional species of concern: red tree vole and osprey. Suitable habitat for red tree voles (i.e. mature Douglas fir trees) is present in isolated patches within the project limits. However, no signs of red tree vole nests or feeding were found during field surveys. Suitable habitat for osprey is not present within the project limits.

This project will not impact sensitive species or their habitats. Additionally, there will be no impacts to jurisdictional wetlands.

### **3.4.2 Mitigation Measures**

ESA fencing at Cuddeback or Fielder Creek culvert inlet and outlet locations is necessary to eliminate any construction from occurring within the Ordinary High Water Mark (OHWM) of either creek.

## **3.5 Floodplains**

The majority of this project is within Zone A4, 100-yr. Floodplain in accordance with current FEMA guidelines. This is a longitudinal encroachment in an area of the Van Duzen River that is subject to flooding due to offsite flows and bank overtopping. The community within this Floodplain has been established for almost a century, and residents are familiar with the fact that their property is subject to flooding.

### **3.5.1 Impacts**

This project will not significantly increase the water surface elevations due to its' encroachment of the floodplain. The existing roadway will be raised 2.8 inches with

an AC overlay. This will increase the roadway width from 0 - 5 feet in the floodplain fringe. There are buildings existing between the roadway and the Van Duzen River that could potentially see an increase in water surface elevation (WSEL). This is not considered a significant raise in WSEL according to Caltrans District 1 Hydraulics staff.

### **3.5.2 Mitigation Measures**

The preferred alternatives widening of the existing roadway will offer the least disturbance to the community, improve the safety of the roadway by increasing site distance, adding shoulders for pedestrians and bicyclists and also improve the driveway approaches throughout the project limits. This work will include an infiltration swale that will be beneficial to biological floodplain values. With this approach, the work on the proposed project is not significant floodplain encroachment in accordance to FEMA guidelines in Title 23, part 650 A of the code of Federal Regulations. Incorporation of the drainage systems recommended for this project, will improve drainage impacts to private properties in the nearby vicinity.

## **3.6 Visual/Aesthetics**

The Town of Carlotta is located in the Van Duzen River valley, which is approximately 1 mile in width. The project is adjacent to the Van Duzen River, which is federally designated as a Wild and Scenic River. Within the viewshed, the Coastal Range rises approximately 1400 – 2000 feet above the valley floor. Carlotta is located in a rural residential landscape surrounded by forests and agricultural lands. A Pacific Lumber mill is visible to the west of town. Route 36 provides east-west access for Northern California and connects the North Coast with Red Bluff in the Sacramento Valley and Susanville in Northeastern California.

Vegetation coverage in the viewshed includes redwood forests, agricultural fields, riparian grasslands and woodlands. Most of the vegetation coverage along the Route 36 corridor in the project area is residential landscaping with ornamental trees, shrubs, flowers and lawns. Many residents use landscaping and solid infill fencing for privacy screening. There are several mature street trees located adjacent to the existing highway within the project area, including two mature California bay trees. The redwood forest is the dominant vegetation coverage visible in the middleground and background of the project viewshed.

### **3.6.1 Impacts**

Route 36 will be widened to 32 feet to provide two 11 foot lanes and two 5 foot shoulders. Caltrans will be acquiring between 5 to 35 feet of residential land to provide for a mostly uniform right-of-way width throughout the project area. Route widening will impact existing landscape up to 5 feet from the proposed drainage swale centerline. Impacts may include removal of or alterations to existing fences, landscaping, mail boxes, driveways, and utility poles. There are several buildings located adjacent to the existing highway alignment.

Some of the older buildings such as the gas station and grocery store at PM 7.24 were constructed within 19.7 feet of the existing highway alignment. The proposed alignment may decrease the amount of area and functional use between buildings and the new roadway shoulders. Most houses are sited between 19.7 and 98.4 feet from the edge of the highway and widening may slightly decrease the functional area of the front yard. The highway will appear closer and wider to residences. Visibility of the roadway will increase with the removal of roadside landscaping and fencing.

A determination by the United States Department of the Interior indicates the proposed project will not have a direct and/or adverse effect on the values for which the Van Duzen River was designated.

### **3.6.2 Mitigation Measures**

Route 36 is considered a Main Street for the town of Carlotta and this main street segment comprises the proposed project limits. Widening will open up the viewshed for this community. Esthetically, new paving, gateway treatments, and the left lane channelization, will enhance the main street image.

Impacts to existing vegetation within the project limits will be minimized where practical. Caltrans will work with property owners to replace fencing, landscaping and other front yard appurtenances where feasible and required. The project landscape architect will be involved in working with the community to develop the new look and ambience of the corridor.

## **3.7 Traffic - Pedestrian and Bicycle Facilities**

Route 36, a Federal Aid Primary Rural Minor Arterial, is a regional east-west route and is part of the Federal Forest Highway System from PM 45.1 on into District 2. It is a two-lane conventional highway functionally classified as a Minor Rural Arterial.

Current traffic volumes on this route are 3,300 Annual Average Daily Traffic (AADT) and represent a combined estimate for travel in both directions. Current peak-hour traffic is estimated to be approximately 470 vehicle trips through the corridor. A component of the traffic moving through the corridor is related to truck movement. It is estimated that approximately 9% of the total AADT can be attributed to truck traffic.

### **3.7.1 Impacts**

Accident data for this area indicates that 14 collisions occurred between October 1998 and September 2003. Five of the fourteen collisions were injury, however, none of these were fatal.

The community of Carlotta is situated longitudinally along this section of highway. There are no other streets that parallel Route 36. Therefore Route 36 provides the connection for perpendicular streets and driveways bordering Route 36. A pedestrian or bicyclist traveling through Carlotta has no other option than to travel on Route 36 shoulders. Residents and school officials of Carlotta have indicated that there is a need for wider shoulders to accommodate pedestrians and bicyclists. The existing highway has paved shoulders that are up to 4 feet wide in some locations, but more typically, paved (or even graded) shoulders are non-existent.

### **3.7.2 Mitigation Measures**

Construction activities will be conducted in a manner to least disrupt or restrict the travelling public. No lane closures will take place during designated holidays. During the majority of the widening operations one-way traffic control would be limited to a total distance of one mile. Advance notification of any closure will be provided to, and coordinated with appropriate local emergency service providers (i.e., the hospital, fire department, police department, and ambulance service). Flyers will be distributed to the residents of Carlotta and the local traveling public providing advance notification of construction restrictions and activities.

## **3.8 Historical Resources**

The Historic Architectural Survey Report (HASR) concerns the evaluation of properties along State Route 36 in Carlotta, Humboldt County, from postmiles 5.8 to 7.6. Of the 70 properties within the Area of Potential Effects (APE), 32 were formally

evaluated in this report, and 38 properties in the APE were treated under the June 1, 2001 “Interim Policy for the Treatment of Buildings Constructed in 1957 or Later.”

### **3.8.1 Impact**

The HASR concludes that none of the properties appear to be eligible for the National Register of Historic Places. In addition, there does not appear to be the potential for a National Register-eligible historic district or historic landscape that would include any of the properties as contributing elements.

### **3.8.2 Mitigation Measures**

Caltrans has evaluated the resources in accordance with Section 15064.5 (a)(2)-(3) of the CEQA Guidelines, using criteria outlined in Section 5024.1 of the California Public Resources Code, and determined that the resources are not historical for the purposes of CEQA.

## **3.9 Archaeological Resources**

The archeological field survey of the project area was conducted on four separate dates between the winter of 2001 and spring of 2002. A follow-up sampling survey of the project area was conducted on February 2, 2005. The surveys conducted included all areas that would potentially have work occurring in them. This included areas that could be used for equipment staging.

### **3.9.1 Impact**

The archaeological surveys identified no new archaeological sites. According to Douglas - 1979, 1988 and Wyman – 1998, no archaeological or cultural resources were found in the area. Native American consultation with the Wiyot Tribe and the Bear River Band of Rohnerville Reservation also yielded a response of no known archaeological sites associated with the project location.

### **3.9.2 Mitigation Measures**

If previously unidentified cultural materials are unearthed during construction, it is Caltrans’ policy that work be halted in the area until a qualified archaeologist can assess the significance of the find. An additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

## **Chapter 4** Cumulative Impacts

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### **4.1 Cumulative Impacts**

Cumulative impacts usually result from past, present and reasonably foreseeable future actions, combined with the potential impacts of this project.

This project will improve a segment of State Route (SR) 36 that moves vehicles through the small community of Carlotta. The intention of this project is to construct 1.7 miles of 5 foot shoulder on both sides of the highway to facilitate safer passage up and down the corridor for pedestrians and bicyclists. A left turn lane will be constructed at Wilder Road to allow for safer turns onto Wilder Road. Wilder Road is the main access road to and from the elementary school. Overlaying the asphalt, re-striping the roadway, drainage adjustments and providing gateway aesthetics, do little to generate impacts that could be added to other types of development for a comprehensive evaluation.

The Route Concept Report (RCR) calls for Route 36 to remain a two-lane conventional highway on its present alignment, and to be maintained and rehabilitated, as necessary, at its present width. The RCR also states that operational improvements and safety projects should be considered on a limited basis, and constructed to appropriate standards.

This project will not affect the capacity or design speed of the subject section of highway and will have no impact on economic growth or the rate of development, commercial, residential, or otherwise.

# **Chapter 5**      California Environmental Quality Act Evaluation

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## **5.1      CEQA Environmental Checklist**

The following checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. The CEQA impact levels include potentially significant impact, less than significant impact with mitigation, less than significant impact, and no impact. Please refer to the following for detailed discussions regarding impacts:

CEQA:

- Guidance: Title 14, Chapter 3, California Code of Regulations, Sections 15000 et seq. ([http://www.ceres.ca.gov/topic/env\\_law/ceqa/guidelines/](http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines/))
- Statutes: Division 13, California Public Resource Code, Sections 21000-21178.1 ([http://www.ceres.ca.gov/topic/env\\_law/ceqa/stat/](http://www.ceres.ca.gov/topic/env_law/ceqa/stat/))

CEQA requires that environmental documents determine significant or potentially significant impacts. In many cases, background studies performed in connection with the project indicate no impacts. A “no impact” reflects this determination. Any needed discussion is included in the section following the checklist.

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

**AESTHETICS** - Would the project:

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**AGRICULTURE RESOURCES** - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**AIR QUALITY** - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |



CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Expose sensitive receptors to substantial pollutant concentrations?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Create objectionable odors affecting a substantial number of people?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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#### **BIOLOGICAL RESOURCES** - Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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#### **COMMUNITY RESOURCES** - Would the project:

a) Cause disruption of orderly planned development?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

b) Be inconsistent with a Coastal Zone Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Affect life-styles, or neighborhood character or stability?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Affect property values or the local tax base?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Result in alterations to waterborne, rail, or air traffic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Support large commercial or residential development?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k) Affect wild or scenic rivers or natural landmarks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**CULTURAL RESOURCES** - Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**GEOLOGY AND SOILS** - Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### HAZARDS AND HAZARDOUS MATERIALS -

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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#### **HYDROLOGY AND WATER QUALITY** - Would the project:

a) Violate any water quality standards or waste discharge requirements?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Otherwise substantially degrade water quality?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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j) Inundation by seiche, tsunami, or mudflow?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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#### LAND USE AND PLANNING - Would the project:

a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Conflict with any applicable habitat conservation plan or natural community conservation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

#### MINERAL RESOURCES - Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

#### NOISE - Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

#### POPULATION AND HOUSING - Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

#### PUBLIC SERVICES -

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Police protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Schools?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Parks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Other public facilities?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

## RECREATION -

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

## TRANSPORTATION/TRAFFIC - Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

e) Result in inadequate emergency access?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

f) Result in inadequate parking capacity?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

## UTILITIES AND SERVICE SYSTEMS - Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

g) Comply with federal, state, and local statutes and regulations related to solid waste?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

#### MANDATORY FINDINGS OF SIGNIFICANCE -

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------



Yes

No

**SECTION 4(F) RESOURCES** – Does the project:

a) Result in the use of any publicly owned land from a park, recreation area, or wildlife and waterfowl refuge, as defined by section 4(f) (23 CFR 771.135)?

☐☒

b) Affect a significant archaeological or historic site, structure, object, or building, as defined by section 4(f) (23 CFR 771.135)?

☐☒

c) Involve “constructive use”, as defined by section 4(f) (23 CFR 771.135)?

☐☒

## **Chapter 6**      List of Preparers

---

This Initial Study (IS) was prepared by the North Region of the California Department of Transportation (Caltrans). The following Caltrans staff participated in preparing this document:

Lena R. Ashley, Chief, North Region Environmental Services. Consultation

Thomas Balkow, Senior Environmental Planner. Consultation

Daniel Bui, Project Engineer. Authored Carlotta Project Report

Janice Calpo, Staff Architectural Historian, Contribution: Historic Architectural Survey Report

Sherry Douglas, Associate Environmental Planner (Biologist). Contribution: Natural Environmental Study Memorandum

Ed Espinoza, Associate Environmental Planner (Author)

Larry French, Associate Environmental Planner (Co-Author)

Ken Hallis, Hydraulics Engineer. Contribution: Floodplain Evaluation Report

Jon Hedlund, Caltrans Engineer. Contribution: Hazardous Waste Initial Site Assessment.

Jim Hibbert, Associate Landscape Architect, Contribution: Visual Impact Analysis

Timothy Keefe, Associate Environmental Planner (Cultural Resources). Contribution: Historic Property Survey Report, Archaeological Survey Report

Richard Mullen, Project Manager

## Chapter 7      References

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- Baumhoff, M. A., 1958, *California Athabascan Groups*. University of California Anthropological Records Vol. 16(5). Berkeley.
- Beck, W. A. and Ynez D. H., 1988, *Historical Atlas of California*. University of Oklahoma Press, Norman.
- Brett, J.R., 1952, *Temperature Tolerance in Young Pacific Salmon, Genus Oncorhynchus*. Pacific Biological Station and Dept. of Zoology
- Calpo, J., 2002, *Historical Architectural Survey Report for the Carlotta Shoulder Widening Project, State Route 36, 01-HUM-36, PM 5.8/7.6 (KP 9.3/12/2), Carlotta, Humboldt County*. CDOT – D1.
- Cook, S.F., 1956, *The Aboriginal Population of the North Coast of California* Vol. 16(3). Berkeley.
- Department of Parks and Recreation, 1976, *California Inventory of Historic Resources*. SHPO - Sacramento; 1989, *Survey of Surveys*. SHPO - Sacramento; 1990, *California Historical Landmarks*. SHPO - Sacramento; 1992, *California Points of Historical Interest*. SHPO – Sacramento.
- Douglas, B., 1979, *Archaeological Reconnaissance Report for Proposed RCB Extension and Realignment of Highway 36, Two Miles East of Yager Creek Bridge, Humboldt County, 01-HUM-36, PM 6.9/7.2*. CDOT; 1988, *Archaeological Survey Report for the Proposed Culvert Rehabilitation Project on Route 36, PM 0.0 to 45.1 in Humboldt County*. CDOT – D1.
- Elsasser, A. B., 1977, *Mattole, Nongatl, Sinkyone, Lassik, and Wailaki*. Handbook of North American Indians, Vol. 8. pp. 190-204, Washington, DC.
- Fredrickson, D. A., 1973, *Early Cultures of the North Coast, California*. Davis; 1984, *The North Coast Region in California Archaeology*, pp. 471-527. New York.

- Genzoli, A., 1950, "*A Dog's Memorial.*" Susie Baker Foundation Paper's Collection, Vol. 32. Humboldt
- Hoover, M. B, Hero, E. R., Ethel, G. R. & Abeloe, W. N., 1990, *Historic Spots in California*, Stanford.
- Meighan, C. W., 1955, *Archaeology of the North Coast Ranges, California.* University of California Archaeological Survey Reports, 30:1 – 39. Berkeley.
- Merriam, C. H. 1923, *Application of the Athabascan Term Nung-kahhl*, *American Anthropologist*, 25(2): 276 – 277.
- Schwarzkopf, C., 1949, "*Carlotta-A Pioneer Family Named I.*," Humboldt.
- State of California, 1975, *Van Duzen River Basin Environmental Atlas*. Sacramento.
- West, G. J. 1993, *There Grows an Green Tree: Papers in Honor of David A. Fredrickson*, pp 219 – 235. Davis.
- White, G. G., 1993, *Cultural Diversity and Culture Change in Prehistoric Clear Lake Basin: Final Report of the Anderson Flat Project*, Pub.13, Davis.
- White, G. G., 1992, *A Research Design for the Anderson Flat Project, Archaeological Data Recovery Investigations at Sites CA-LAK-72, 509, 510, 536, 538, 542, and 1375, Lake County, CA*, Rohnert Park.
- Wyman, A. H., 1998, *Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in CA – American Tank THP (Amendment #1.)* Klamath.

## **Appendix A**   Coordination and Consultation

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The following agencies and organizations were contacted during the project development process:

- Humboldt County Health Services
- United States Fish and Wildlife Service
- Humboldt County Public Works Department
- Cuddeback Elementary School
- California Highway Patrol
- Wiyot Tribe
- Bear River Band of Rohnerville Rancheria
- Humboldt County Historical Society
- State Historical Preservation Office – California
- National Register of Historic Places
- California Register of Historic Resources
- California Inventory of Historic Resources

## **Appendix B** Title VI Policy Statement

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DEPARTMENT OF TRANSPORTATION  
OFFICE OF THE DIRECTOR  
1120 N STREET  
P. O. BOX 942873  
SACRAMENTO, CA 94273-0001  
PHONE (916) 654-5267  
FAX (916) 654-6608



July 26, 2000

### **TITLE VI POLICY STATEMENT**

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, sex and national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

A handwritten signature in black ink that reads "Jeff Morales".

JEFF MORALES  
Director

## **Appendix C** Mitigation and Monitoring Commitments

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The Resident Engineer shall be responsible for ensuring that all design features and mitigation measures shall be implemented throughout construction. The Resident Engineer shall also be responsible for ensuring that the contractor does not work within any stream channel. Environmentally Sensitive Area (ESA) fencing should be placed to exclude any work within the creek areas where culvert or bridge related work might take place. ESA fencing should be placed to exclude the contractor from entering any of the Judy's Market property or any pre-identified wetland areas (although these have been excluded from the project, it is necessary to fence off the wetlands to exclude potential staging or construction related activities associated with the project.) The following is a list of mitigation measures that shall be sent to the Construction Resident Engineer.

1. Standard construction practices will be used to mitigate any temporary construction impacts to lands adjacent to the project;
2. Controlled access to the construction site;
3. Fenced construction areas;
4. Maintained access to all businesses and private property;
5. Limited Right-of-Way; only what is necessary to construct the project;
6. The Resident Engineer will coordinate and communicate with property owners, emergency personnel and local and the traveling public during the construction of this project;
7. Construction activities will be conducted in a manner least disrupt or restrict the traveling public;
8. Dust control practices will be in place and enforced;
9. All hazardous materials will be handled and disposed of in accordance with local, State and Federal laws and Department specifications. Grading and construction activities will be monitored to identify any hazardous

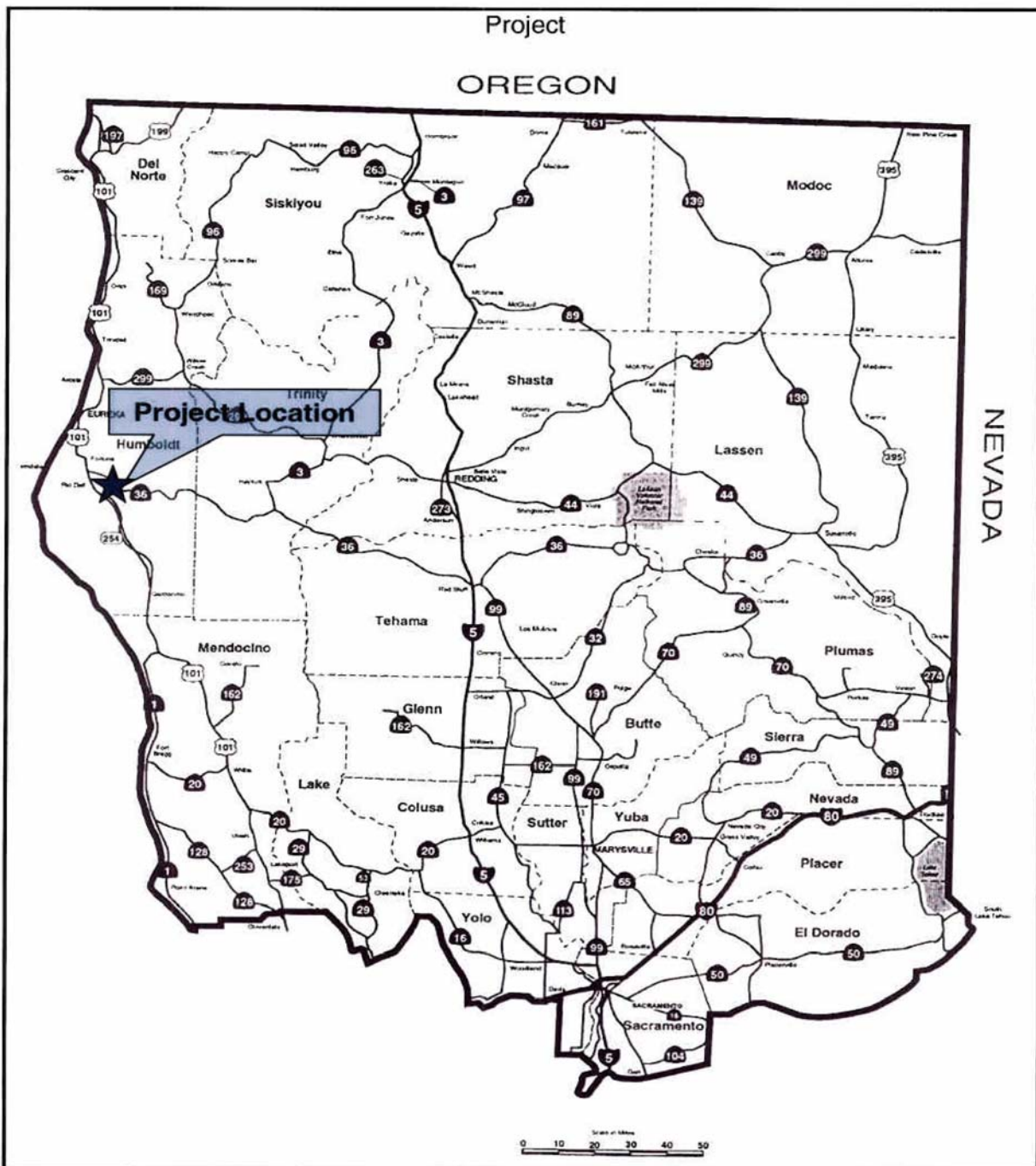
materials that are discovered during construction. If materials are discovered during construction, the resident engineer will halt work in the area of concern;

10. Construction activities affecting natural habitats or undisturbed soils will be minimized to the extent practicable. All areas left disturbed at the end of construction will be seeded and mulched to help prevent the establishment of invasive weeds;
11. Environmentally Sensitive Area fencing will be placed to exclude any work in any water body (e.g., Creek, tributary, etc...) Additionally, ESA fencing will be placed around any wetland area adjacent to the project to prevent the contractor from staging equipment or worker invasion in these defined areas.



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- FIGURE 2 PROJECT LOCATION MAP
- FIGURE 3 DEPARTMENT OF INTERIOR LETTER
- FIGURE 4 TYPICAL CROSS SECTION
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- LAYOUT 2 DESIGN LAYOUT
- LAYOUT 3 DESIGN LAYOUT
- LAYOUT 4 DESIGN LAYOUT
- LAYOUT 5 DESIGN LAYOUT
- LAYOUT 6 DESIGN LAYOUT
- LAYOUT 7 DESIGN LAYOUT (EASTERN END)



## FIGURE 1

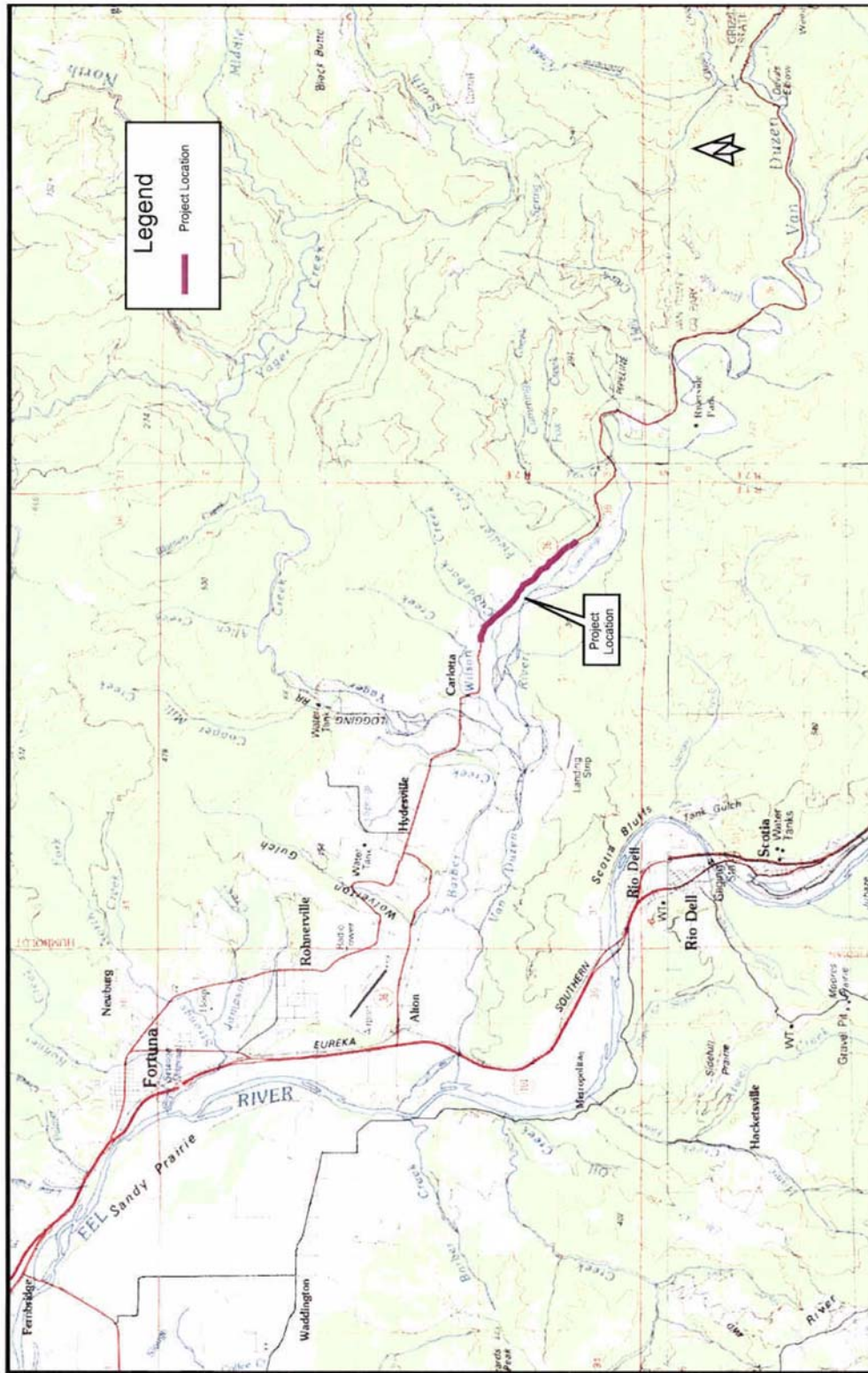
## PROJECT VICINITY

State Route 36 (PM **5.8/7.6**)  
Carlotta - Humboldt County

State of California  
Department of Transportation

EA 01-323300





**Figure 2**

**Project Location**

State Route 36 (PM 5.8/7.6)

Carlotta - Humboldt County

State of California  
Department of Transportation

EA 01-323300







## United States Department of the Interior

NATIONAL PARK SERVICE

Pacific West Region  
1111 Jackson Street  
Oakland, CA 94607

May 17, 2005

Mr. Ed Espinoza  
Department of Transportation North Region  
Mail stop 30, 1657 Riverside Drive  
Redding, CA 96049-6073

Subject: Carlotta shoulder widening

Dear Mr. Espinoza:

This letter is in response to my March 30<sup>th</sup> site visit of the shoulder widening project along Route 36 near Carlotta, CA. This project is adjacent to the Van Duzen River which is federally designated and required a Wild and Scenic Rivers Act Section 7 determination.

Section 7 of the Wild and Scenic Rivers Act prohibits federal agencies from "assist[ing] by loan grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established."

The National Park Service considers water resources projects to include projects involving construction in the bed or on the banks of the river. The proposed construction does not involve construction in the bed or on the banks (below the ordinary high water line) of the river and is therefore not considered to be a water resources project, and is not subject to review under Section 7 of the Wild and Scenic Rivers Act.

While this project is not subject to a determination under Section 7, we are concerned with any indirect affects due to slope disturbance and construction above the banks of the river. If at any point the project scope should change you are required to notify the National Park Service.

Based on the information provided, we have determined that the proposed project will not have a direct and adverse effect on the values for which the river was designated.

If you have any further questions, please contact me at (510) 817-1451.

Sincerely,

Stephen Bowes  
CA Wild and Scenic Rivers Coordinator  
National Park Service  
1111 Jackson Street, suite 700  
Oakland, CA 94607

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**Figure 3 - Letter of Consensus from  
United States Department of the Interior**

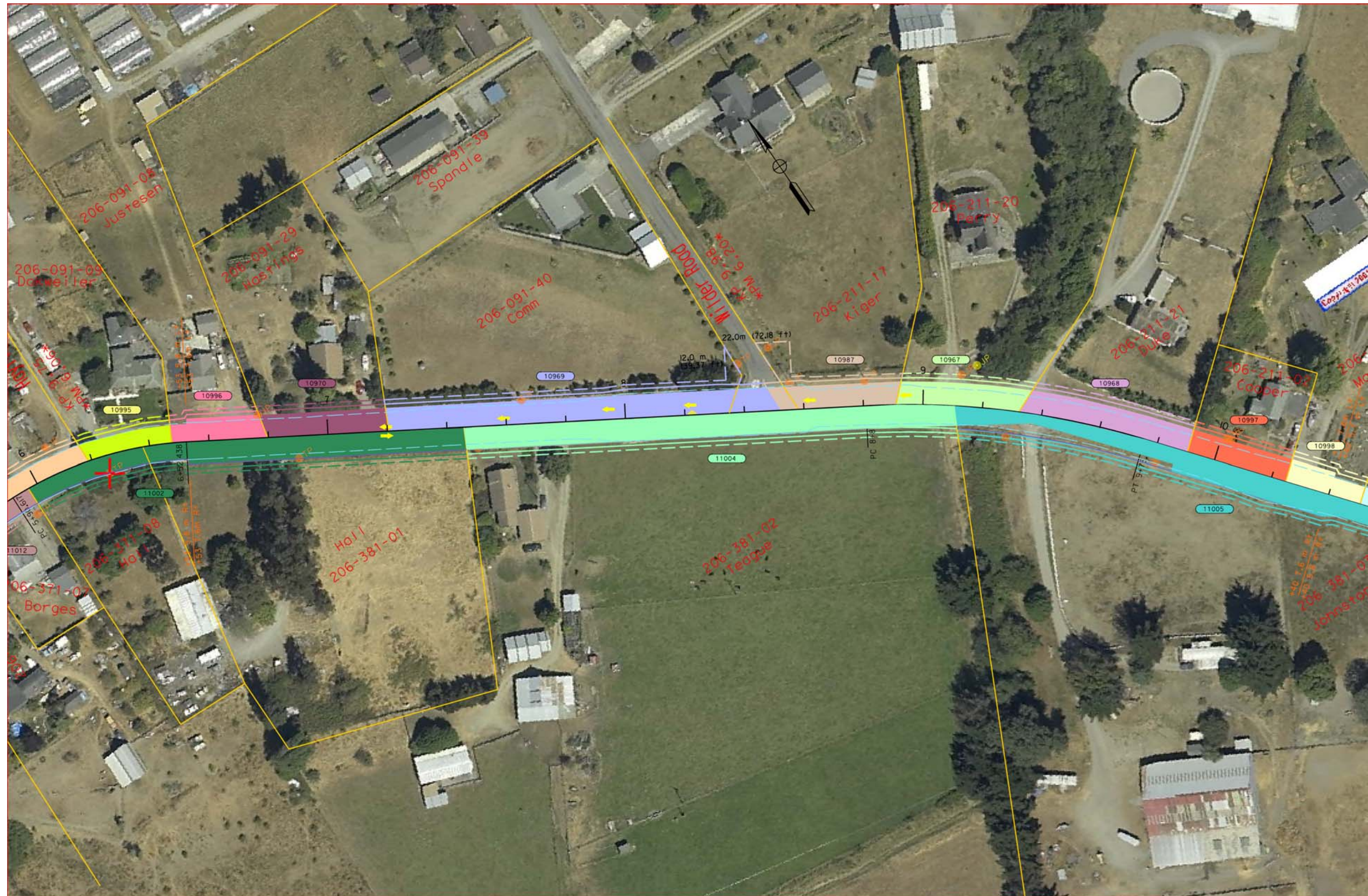


## Figure 4 – Typical Cross Sections



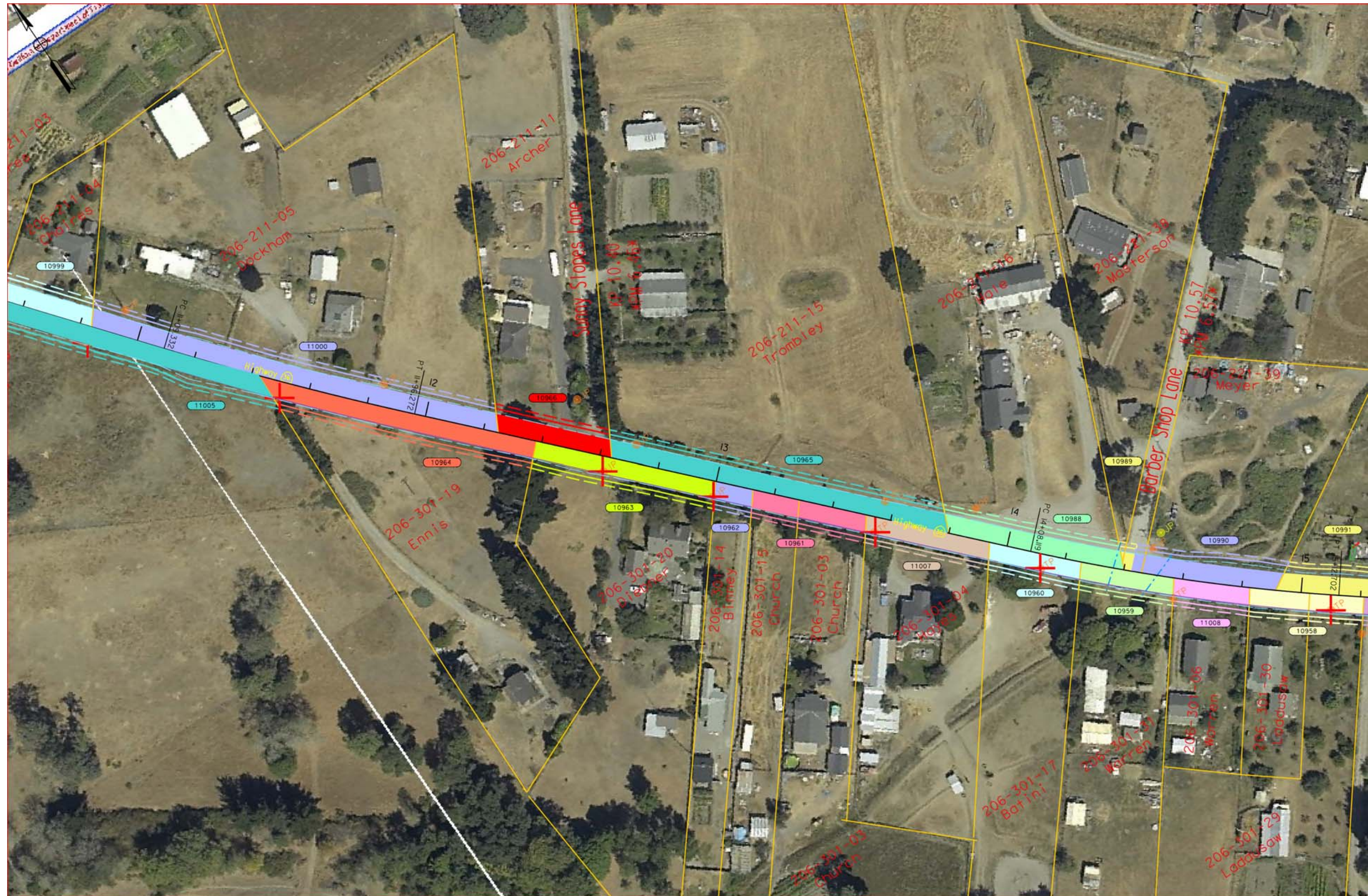






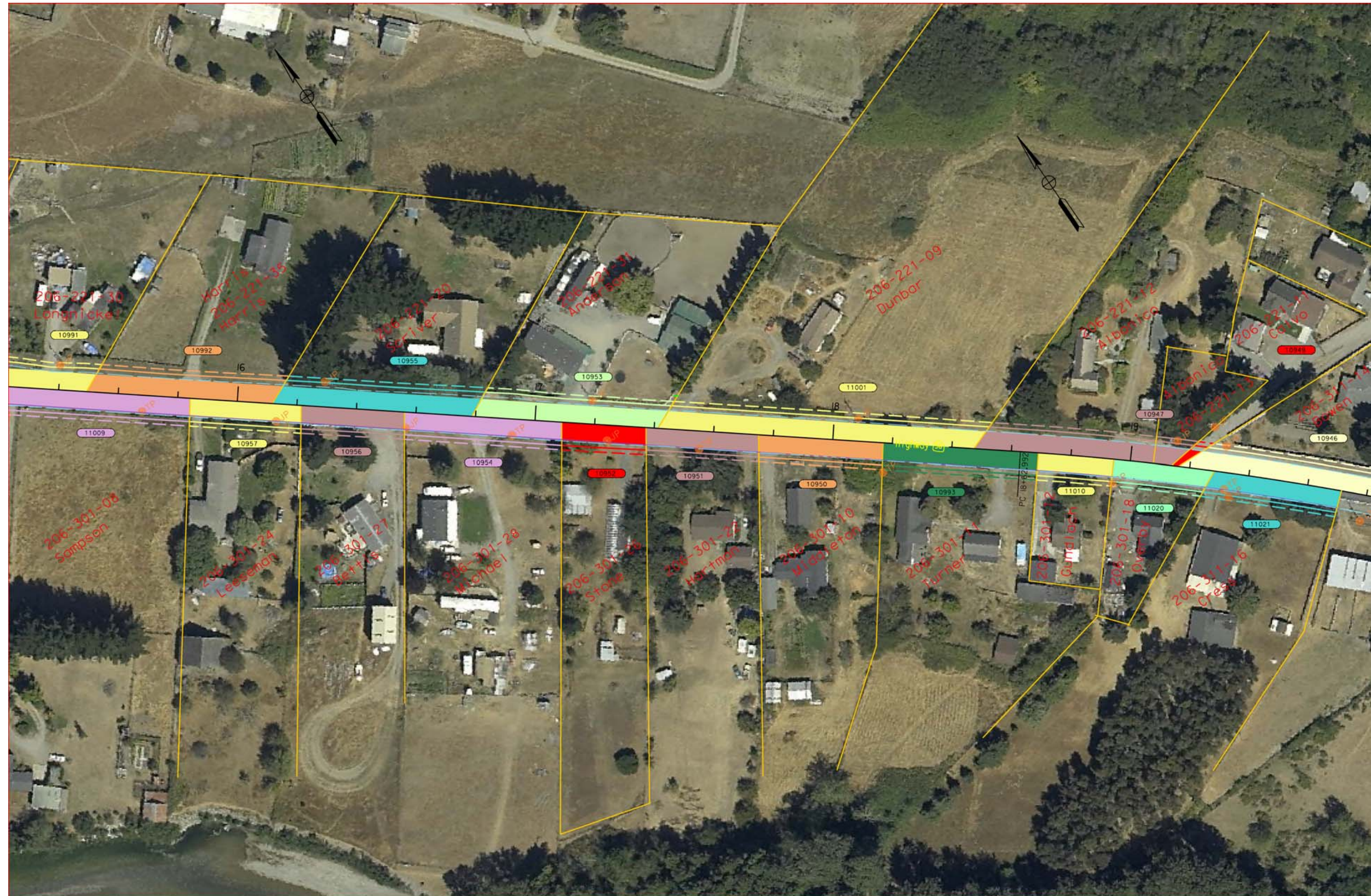
LAYOUT - 2





LAYOUT -3





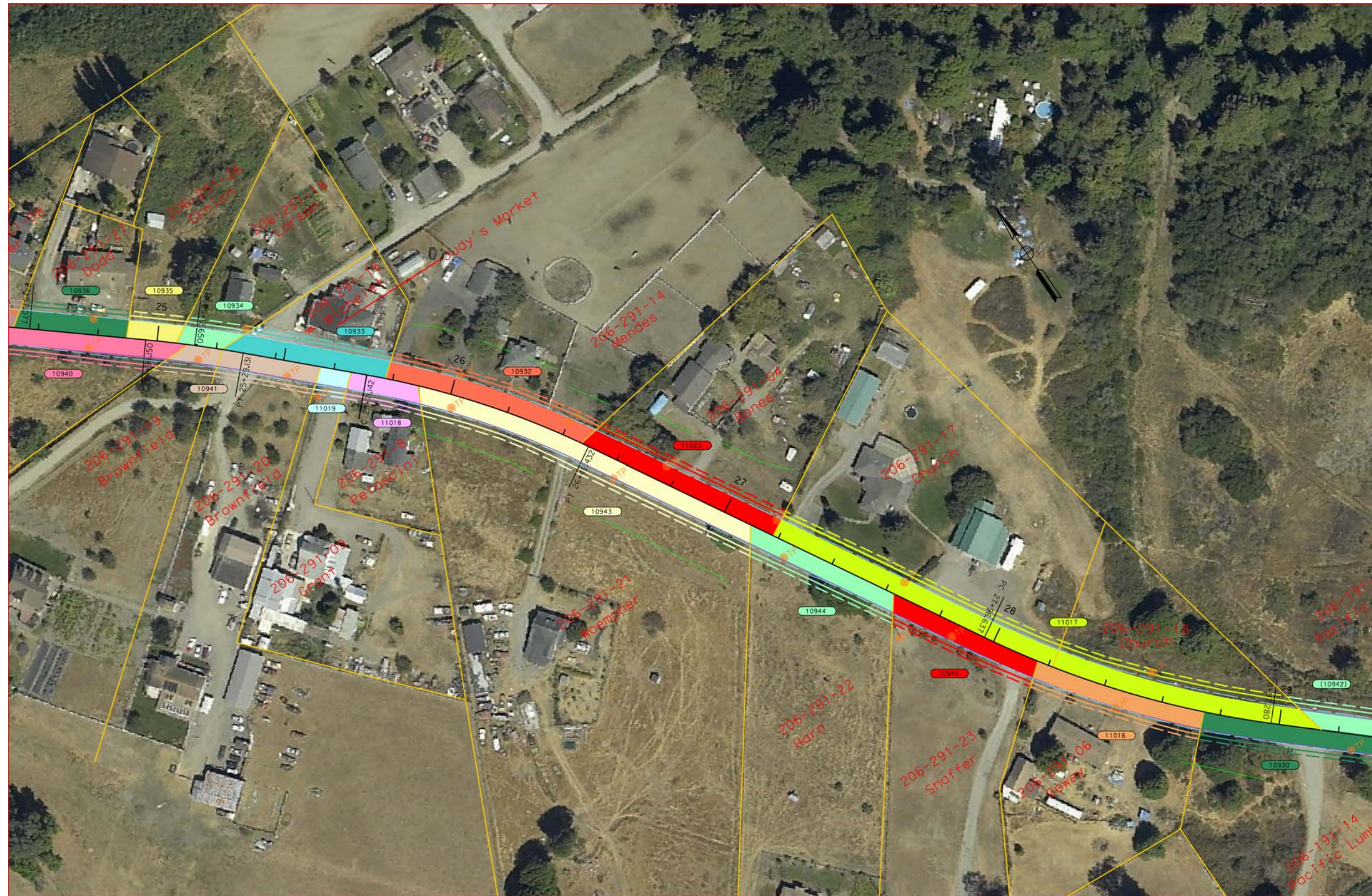
LAYOUT - 4





## LAYOUT – 5





LAYOUT – 6





**LAYOUT – 7**



